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Title: Differences Between Chinese and American Women and Their Experience of Stress Urinary Incontinence in Pregnancy

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Purpose: Stress urinary incontinence (SUI) is a common health problem for childbearing women with a prevalence rate that varies between 30-60% (Fozzatti et al., 2012). Although known to be prevalent in women during pregnancy and postpartum, urinary incontinence is associated more with women during the menopausal stage of life. Urinary incontinence can create health problems such as chronic skin breakdown and urinary tract infections as well as social isolation and decreased physical activity (Gandheri & Oskouei, 2014). Recognizing the presence and significance of SUI during pregnancy may be key to preventing exacerbation of SUI later in life. The lack of understanding of the relationship between pregnancy related SUI and its effect throughout the life span may affect long term quality of life. Due to the social stigma of the problem, nurses are uniquely positioned to care for these woman. The health system can either provide support or be seen as a barrier to women expressing this care concern. Examination of SUI in a multi ethnic population of pregnant women cared for in the same health system revealed significant differences related to ethnicity (Bo, Oglund, Sletner, Morkrid, & Jenum, 2012). How SUI is perceived by different ethnic groups of women, cared for in two unique health care systems has not been explored. Treatment options require engagement with an array of health professionals such as a nurse, physical therapist, and/or behavioral health provider. Treatment can include medication, physiotherapy, and lifestyle behavioral therapy combinations (Ghaderi & Oskouei, 2014). The choice of treatment may be guided by culture and healthcare system beliefs. The purpose of this study is to explore the experience of severity of stress urinary incontinence during pregnancy, its prevalence and associated risk factors, acceptance of treatment options and its effect on quality of life.

Methods: A descriptive cross sectional design was used at two care sites: Guangzhou China and Houston Texas. A total of 356 postpartum women in China and the United States of America (USA) responded to an in person survey between September 2014 to September 2016. Primigravida women were enrolled during the postpartum period to assess their perceptions of SUI during their index pregnancy. One researcher collected data in both sites. All women completed a short demographic survey and two known validated measures: The Incontinence Impact Questionnaire (IIQ) and the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF).

Results: There were significant differences in demographics between the two groups. American women had less health problems prior to pregnancy ($p = .01$) and had higher education ($p = .00$) whereas more Chinese women were married ($p < .001$) and worked outside the home ($p = .00$). American women rated their state of health postpartum significantly greater than Chinese women ($p = .00$). Overall, 37% of women experienced urinary incontinence with Chinese women having

experienced more incontinence than American women ($p = .0001$). More Chinese women experienced an episiotomy than American women. More women in China would consider prevention and treatment during pregnancy ($p < .0001$). Chinese and American women both exercised before and during pregnancy with differences noted related to time and intensity ($p < .001$). There are significant differences between acceptable prevention and treatment interventions ($p = .00$). All women would welcome pelvic floor conditioning with few opting for medication or surgery. There are no differences between Chinese ($M = 1.22$ $SD = 0.58$) and American ($M = 1.23$, $SD = 0.72$) women between the ICIQ-SF scores. There were significant differences related to the IIQ impact of incontinence on quality of life measure ($p = .001$).

Conclusion: There are significant differences between Chinese and American women related to prevalence, the presence of the risk factors and acceptable prevention and treatment interventions. Matching women's beliefs and understanding with acceptable treatment in relationship with the culture of the society and health care system, may improve care over time. Nurses in both cultures are viewed as supportive care providers that could assist with prevention and care for women who experience SUI.

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